

# ACTUATOR CORROSION RESISTANCE OPTIONS

**TRU-FLO** OFFERS A WIDE VARIETY OF ACTUATOR COATINGS WHICH  
EXTEND THE LIMITS OF SERVICE FOR ALUMINUM ACTUATORS.

Material/Finish	Aluminum: Hard Anodized	Aluminum: Anodized w/ Polyamide Epoxy coating	Aluminum: Electroless Nickel Infused	Aluminum: PTFE/PFA Coating	Stainless Steel: 300 series
Appearance	Silver-gray with a low gloss appearance	Black with a medium gloss finish	Medium gloss silver finish	Glossy black/ optional white finish	Silver; low to medium gloss unless polished
General Properties	Good general corrosion properties in most "natural" environments with pH from 4.5 to 8.5. Good resistance to salt air environments. The coating is extremely hard and resistant to abrasion.	This epoxy coating is a relatively thick coating which creates a barrier against many of the chemicals which anodizing alone cannot adequately resist. It will resist more acidic or basic environments than anodizing alone.	Uniformly thick coating with essentially no porosity and a reasonably high hardness. The coating is pure, tough, hard, and resistant to many types of corrosion media.	This coating provides complete surface coverage and exhibits excellent corrosion resistance properties in a wide variety of applications. In addition, it is FDA approved for food contact.	304 and 316 Stainless steel are the most commonly used alloys. Both have good corrosion resistance but 316 is generally considered superior, however more expensive.
Relative Cost to Purchase	Lowest cost option	Moderate	Moderately high	Moderately high	Highest cost option by a significant margin
Performance Limitations	Highly acidic or basic environments will break down the coating.	Good general corrosion resistance, particularly in salt or alkaline environments. Limited resistance to acids. Surface chalking will occur when exposed to UV radiation. Also suitable for low concentrations of caustic washdown solutions.	The coating will provide enhanced corrosion protection in very acidic environments but will not withstand attack from strong alkaline media. Also suitable for low to medium concentrations of caustic washdown solutions.	These coatings are resistant to any environment into which an actuator would be installed. Provided the integrity of the surface is intact, the coating can resist a broad array of chemical environments at temperatures ranging from sub-zero to over 300°F.	Although Stainless Steel does offer enhanced corrosion resistance, it also is dramatically higher in both cost and weight. The weight differential will often necessitate the use of special support bracketry.



Increased Corrosion Resistance

Material/Finish	Aluminum: Hard Anodized	Aluminum: Anodized w/ Polyamide Epoxy coating	Aluminum: Electroless Nickel Infused	Aluminum: PTFE/PFA Coating	Stainless Steel: 300 series
General Indoor Atmosphere	AR	BR	BR	BR	BR
Outdoor Atmosphere, Non-Exposed	AR	BR	BR	BR	BR
Outdoor Atmosphere, Non-Exposed	AR	BR	BR	BR	BR
Outdoor Atmosphere, Exposed with Salt Spray	AR	AR	BR	AR	BR
Caustic Washdown: Low Concentration	NR	LL	AR	AR	BR
Caustic Washdown: High Concentration	NR	LL	LL	AR	AR

## Legend

BR	Better than Recommended; may cost significantly more than necessary for reliable long-term service
AR	Acceptable and Recommended
LL	Limited Life; actuator will function for a period of time with a shortened life due to external corrosive attack
NR	Not Recommended

The service guidelines presented here are intended to provide general information about the service limitations and performance of coated actuators. Tru-Flo should be contacted to verify the suitability of the coating in a specific environment.

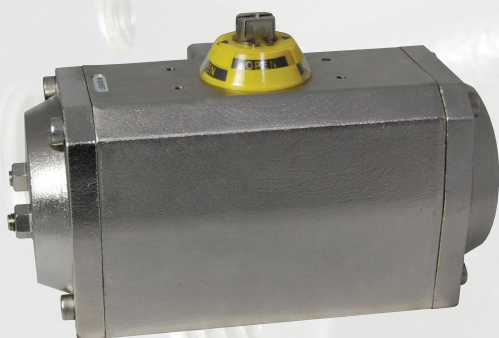
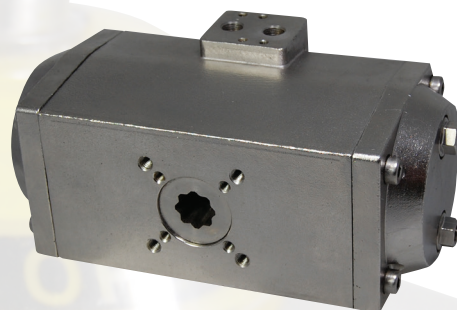
# STAINLESS STEEL ACTUATORS SS SERIES



## Features & Specifications

- » Compact design utilizes the same body for double acting and spring return units.
- » NAMUR VDI/VDE 3845 and ISO 5211 mounting dimensions
- » Female pinion drive standard, with optional drives to meet specific application requirements
- » Ideal for high cycle applications with honed bore
- » Rugged tooth design allowing for manual override
- » High visibility position indication
- » High cycle life wear pads serves as both guide and wear bearings
- » Epoxy coated spring cartridges are pre-loaded for safety
- » Alternative operating media includes air, water, nitrogen and compatible hydraulic fluids
- » Stainless steel fasteners
- » Full traceability of all component parts
- » Factory pressure and leak tested and boxed individually
- » Wide range of adapters and accessories available

**TRU-FLO'S** NEW STAINLESS STEEL ACTUATORS ARE BY DESIGN, BEST IN CLASS. THE SS SERIES ACTUATORS TAKE CORROSION RESISTANCE TO THE EXTREME WITH ALL OF THE GREAT ENGINEERING FEATURES THAT SEPARATE **TRU-FLO** FROM THE COMPETITION. OUR STAINLESS STEEL ACTUATORS CONFORM TO THE ISO STANDARD WHICH MAKES VALVE AUTOMATION EASY AND COST EFFECTIVE. **TRU-FLO'S** DUAL PATENTED TRAVEL STOPS ALLOW UP TO 110° OF STROKE IN A 90° ACTUATOR, FAR SUPERIOR IN POSITIONING ADJUSTMENT.



Model	40 PSIG	60 PSIG	80 PSIG	100 PSIG	120 PSIG
SS12*	62	94	125	156	187
SS16	137	206	275	344	412
SS21	250	375	500	625	750
SS26	375	562	750	937	1125
SS31	500	750	1000	1250	1500
SS36	800	1200	1600	2000	2400
SS46	1562	2344	3125	3906	4687
SS56	3000	4500	6000	7500	9000
SS66	6000	9000	12000	15000	18000

\*SS12 comes standard without dual travel stops

Torque values (in-lbs)